

Figure 1 Performance-intensity functions for normal ear, conductive loss, cochlear site of lesion, and retrocochlear site of lesion.

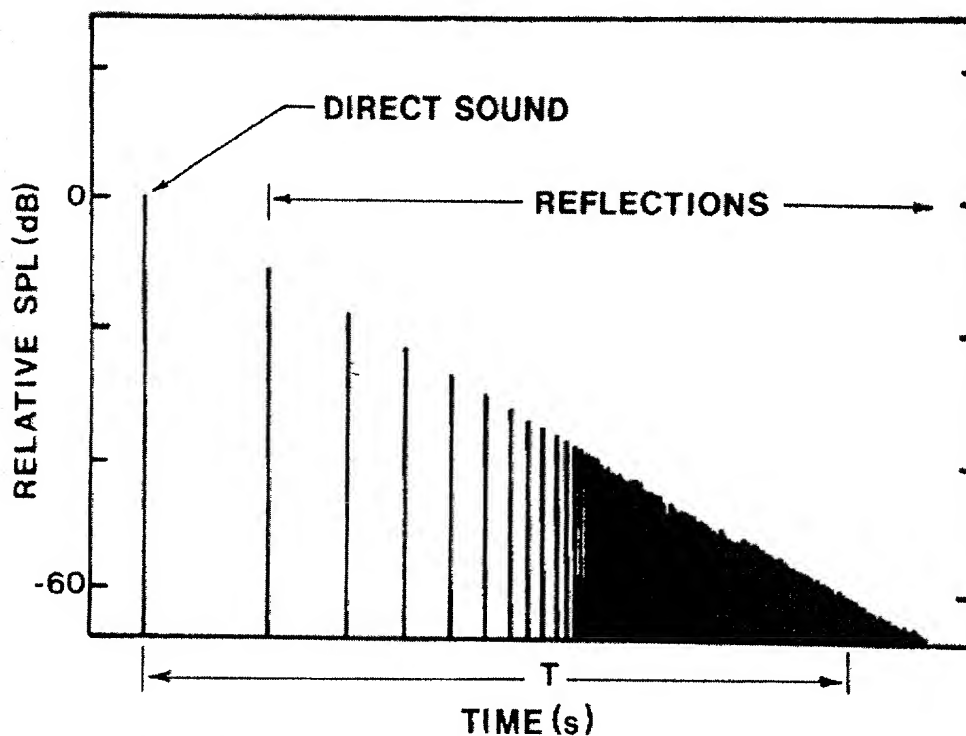


Figure 2 An example of a time sequence of reflections following a brief direct sound. Reverberation time (T) is shown for the 60-dB SPL decrease.

FREQUENCY RANGE (Hz)	PER CENT SPEECH POWER	PER CENT INTELLIGIBILITY
62 - 125	5	1
125 - 250	13	1
250 - 500	42	3
500 - 1000	35	35
1000 - 2000	3	35
2000 - 4000	1	13
4000 - 8000	1	12
	60	5
	95	60
		95

Figure 3
Comparison Chart

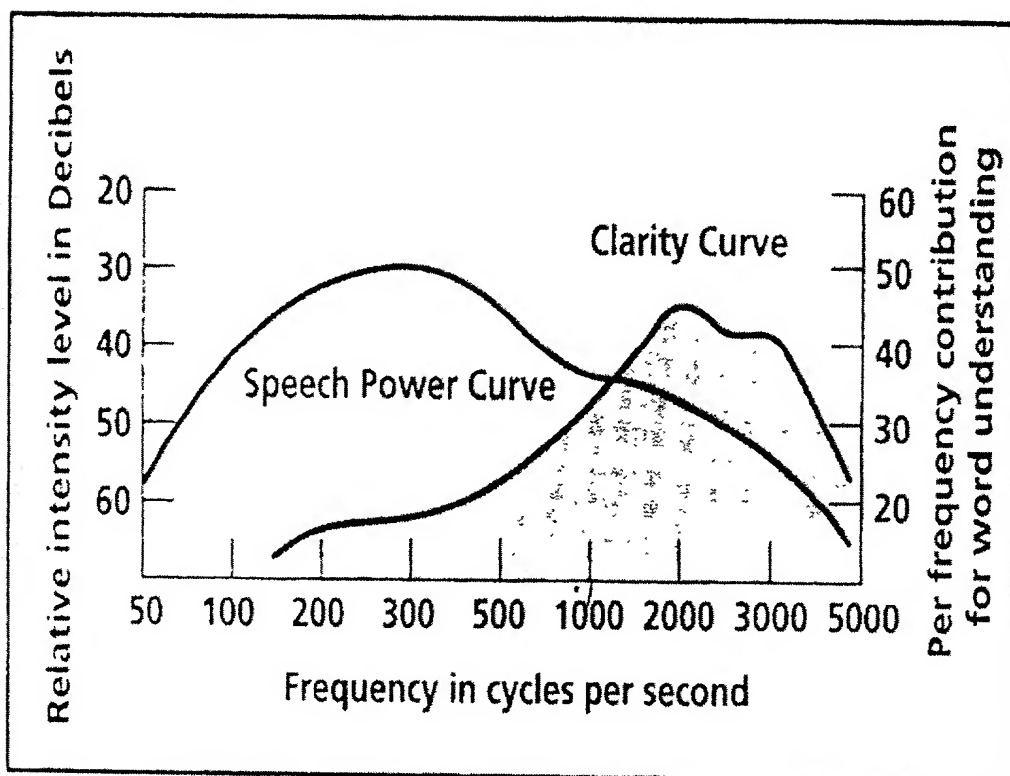


Figure 4
The Speech Power Curve
and the Speech Clarity Curve

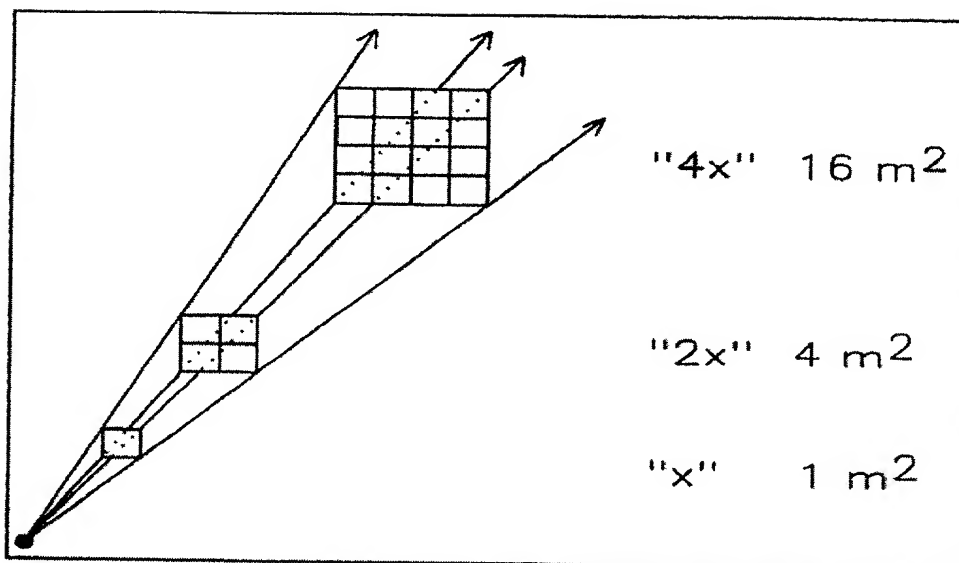


Figure 5 A three dimensional representation of the **inverse square law**. As the distance from the point source of sound increases from **X** to **2X** to **4X**, a finite amount of power is dissipated over a larger and larger area (from 1 m² at **X** to 4 m² at **2X** to 16 m² at **4X**). Hence, the intensity (energy/sec/m²) decreases inversely with the square of the distance from the source.

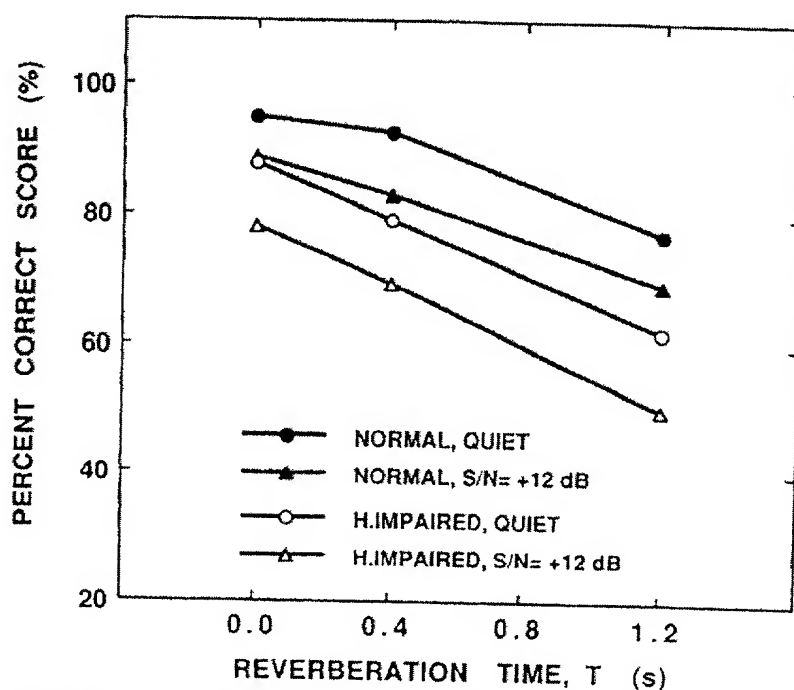


Figure 6 Percent words correct scores for normal-hearing and moderately hearing-impaired school-age children (adapted from Finitzo-Hieber T, Tillman TW. Room acoustics effects on monosyllabic word discrimination ability for normal and hearing-impaired children. J Speech Hear Res 1978;21:440-458).



Figure 6a

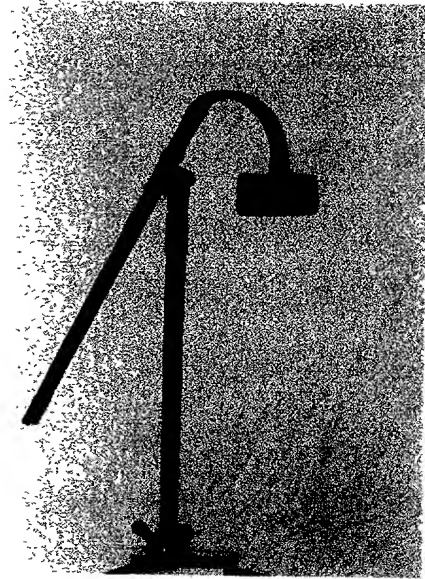


Figure 6b

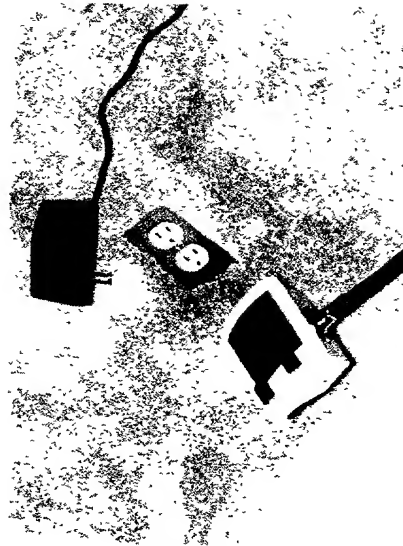


Figure 7



Figure 8



Figure 9



Figure 10